Arcam DV78 DVD player

Lecture de DVD Arcam DV78

DVD-Spieler Arcam DV78

Arcam DV78 DVD-Speler

English

Français

Deutsch

Nederlands

ARCAM

Using this handbook

This handbook has been designed to give you all the information you need to install, connect, set up and use the Arcam DiVA DV78. The remote control handset supplied with the equipment is also described.

It may be that the DV78 has been installed and set up as part of your Hi-Fi installation by a qualified Arcam dealer. In this case, you may wish to skip the sections of this handbook dealing with installation and setting up the unit. Use the Contents list to guide you to the relevant sections.

Safety

Safety guidelines are set out on page 4 of this handbook.

Many of these items are common sense precautions, but for your own safety, and to ensure that you do not damage the unit, we strongly recommend that you read them. This is a class 1 product and requires an earth connection.

Disc types supported

The ARCAM DV78 DVD player plays a range of disc types. These include:

- DVD-video (single region, set at factory)
- CDDA ('normal' audio-CDs) including HDCD decoding, CD-R, and CD-RW
- Video CD, including variants such as CVCD, SVCD and DVCD
- MP3 and WMA audio files, when on a CD-ROM or CD-R/CD-RW (some restrictions apply)
- Picture CDs (JPEG image files).

Contents

English

Safety guidelines

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

ATTENTION
RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

The lightning flash with an arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: In Canada and the USA, to prevent electric shock, match the wide blade of the plug to the wide slot in the socket and insert the plug fully into the socket.

Important safety instructions

This product is designed and manufactured to meet strict quality and safety standards. However, you should be aware of the following installation and operation precautions:

1. Take heed of warnings and instructions
You should read all the safety and operating instructions before operating this appliance. Retain this handbook for future reference and adhere to all warnings in the handbook or on the appliance.

2. Water and moisture
The presence of electricity near water can be dangerous. Do not use the appliance near water – for example next to a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool, etc.

3. Object or liquid entry
Take care that objects do not fall and liquids are not spilled into the enclosure through any openings. Liquid filled objects such as vases should not be placed on the equipment.

4. Ventilation
Do not place the equipment on a bed, sofa, rug or similar soft surface, or in an enclosed bookcase or cabinet, since ventilation may be impeded. We recommend a minimum distance of 50mm (2 inches) around the sides and top of the appliance to provide adequate ventilation.

5. Heat
Locate the appliance away from naked flames or heat producing equipment such as radiators, stoves or other appliances (including other amplifiers) that produce heat.

6. Climate
The appliance has been designed for use in moderate climates.

7. Racks and stands
Only use a rack or stand that is recommended for use with audio equipment. If the equipment is on a portable rack it should be moved with great care, to avoid overturning the combination.

8. Cleaning
Unplug the unit from the mains supply before cleaning.

The case should normally only require a wipe with a soft, damp, lint-free cloth. Do not use paint thinners or other chemical solvents for cleaning.

We do not advise the use of furniture cleaning sprays or polishes as they can cause indelible white marks if the unit is subsequently wiped with a damp cloth.

9. Power sources
Only connect the appliance to a power supply of the type described in the operating instructions or as marked on the appliance.

10. Power-cord protection
Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, and the point where they exit from the appliance.

11. Grounding
Ensure that the grounding means of the appliance is not defeated.

12. Power lines
Locate any outdoor antenna/aerial away from power lines.

13. Non-use periods
If the unit has a standby function, a small amount of current will continue to flow into the equipment in this mode. Unplug the power cord of the appliance from the outlet if left unused for a long period of time.

14. Abnormal smell
If an abnormal smell or smoke is detected from the appliance, turn the power off immediately and unplug the unit from the wall outlet. Contact your dealer immediately.

15. Servicing
You should not attempt to service the appliance beyond that described in this handbook. All other servicing should be referred to qualified service personnel.

16. Damage requiring service
The appliance should be serviced by qualified service personnel when:
A. the power-supply cord or the plug has been damaged, or
B. objects have fallen, or liquid has spilled into the appliance, or
C. the appliance has been exposed to rain, or
D. the appliance does not appear to operate normally or exhibits a marked change in performance, or
E. the appliance has been dropped or the enclosure damaged.

Safety compliance

This product has been designed to meet the IEC 60065 international electrical safety standard.

Installation
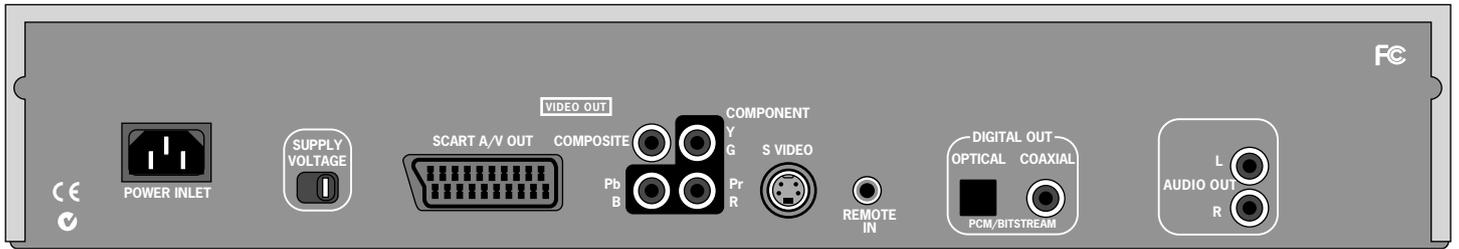
Positioning the unit

Place the DV78 on a level, firm surface and ensure that there is adequate ventilation for the unit.

Connecting outputs: Video

To view the pictures from the DVD player you need to connect one of its video outputs to a TV, monitor or projector.

The DV78 has five video outputs:

- Component video
- RGB
- S-video
- Composite video
- Progressive scan component 525P (480P) and 625P (576P) video.

You only need to use **one** type of video from the list. Choose a type that your TV supports.

> **NOTE**: If your TV supports none of these types of video then it's time to purchase a new TV!

Note that you may connect equipment such as AV receivers in the signal path between the DVD player and the TV, so long as that equipment supports the correct type of video signal. For instructions on how to connect AV equipment, consult the manual for that equipment.

Component video

Use three phono cables to connect the Component Y, Pb, Pr outputs of the DVD player to the Y, Pb, Pr inputs of the TV. Ensure that the cables are suitable for video use and that they are approximately the same length. Some component video interfaces are labelled in different ways: see the table below if your TV's component inputs are not labelled 'Y, Pb, Pr'.

DV78	alternative	alternative	alternative
Y	Y	Y	Y
Pb	Cb	(B–Y)	U
Pr	Cr	(R–Y)	V

> **NOTE**: Component video DVD players and TVs are not generally available in Europe.

RGB output

RGB output is available on both the SCART and Component/RGB sockets and offers picture quality equal to component video.

Use appropriate cables to connect either the SCART connector or RGB phonos to the TV. Note that if you are using RGB output via phono connectors, you will also need to use **COMPOSITE** as a sync signal.

If you are using a SCART connection to your TV, it is best to mute your TV's speakers because SCART also carries stereo audio signals; this prevents audio coming through the TV.

AV control: The SCART output has a control signal that switches your TV to its SCART input when the DV78 is turned on. It will also signal to wide screen TVs the correct aspect ratio (16:9 or 4:3), provided these features are supported by the TV.

S-Video

The S-Video output (also known as **S-VHS** or **Y/C**) is commonly supported by TVs worldwide. Connect the **S VIDEO** output of the DVD player to the S-Video input of the TV using an appropriate cable.

Composite video

If your TV only offers a composite input (sometimes labelled CVBS or just 'video'), connect this to the **COMPOSITE** video output of the DVD player using a phono cable suitable for video use.

> **NOTE**: The DVD player can only support component video *or* RGB video at any one time. This is specified in the setup menu. If you use either of these outputs with an incorrect menu setting, the picture will be coloured in a strange way. Similar effects result from cross connection of the three signals.
>
> If you use component video outputs, you must ensure that the SCART socket is not used. Similarly, if the SCART socket *is* used, disconnect the component video leads.

Progressive video

If your television is capable of accepting a progressively scanned video signal, you may wish to use the progressive video output from the DV78.

To connect the progressive output of the DV78 to your TV, follow the instructions above for connecting component video. If you are unsure whether your TV can accept progressive video, please refer to its instruction manual or consult your dealer.

Connecting Digital audio

If you have an external surround sound decoder, receiver or D-A converter that you wish to use with the DVD player, then you will need to connect it using either a coaxial or optical lead. These digital outputs provide PCM, Dolby Digital, DTS or MPEG multi-channel audio, depending on the source material. It is also possible to set the digital output always to output 2-channel PCM (stereo mix-down) via the setup menu.

If possible, use the coaxial connection as this may offer slightly better performance. Connect the coax output of the DVD player to the digital audio coax input of the decoder/D-A converter or receiver using a phono cable designed for digital audio interconnection.

Alternatively, connect the optical output of the DVD player to the optical input of the decoder/D-A converter or receiver using a TOSLINK optical lead.

Connecting Analogue audio

If you wish to use the high quality D-A converters of the DVD player, then you will need to use the analogue audio outputs of the DVD player.

One output pair is provided, labelled '**L**' (left) and '**R**' (right). Connect these outputs to the input of your amplifier using a suitable pair of interconnect cables.

Remote Control input

The **REMOTE IN** input can be used to pass RC5 codes to the DV78 if it is installed in a position (or system) where infrared cannot be used.

Connecting to a power supply

Mains lead

The appliance is normally supplied with a moulded mains plug already fitted to the lead. If for any reason the plug needs to be removed, it must be disposed of immediately and securely, as it is a potential shock hazard when inserted into the mains socket. Should you require a new mains lead, contact your Arcam dealer.

Wrong plug?

Check that the plug supplied with the unit fits your supply and that your mains supply voltage agrees with the voltage setting (115V or 230V) indicated on the rear panel of the unit.

If your mains supply voltage or mains plug is different, consult your Arcam dealer.

Plugging in

Push the plug (IEC line socket) of the power cable supplied with the unit into the socket (**POWER INLET**) in the back of the unit. Make sure it is pushed in firmly.

Put the plug on the other end of the cable into your power supply socket and switch the socket on.

Configuring your DVD player

Introduction

Congratulations – if you have followed the installation instructions then the required connections to other equipment will have been made. It is now essential to go through an initial set up procedure to ensure the DVD player is configured correctly for use.

Switching the power on

Press in the **POWER** button on the front panel. The power LED above the switch lights green.

Obtaining a TV picture

Ensure the TV is switched on and that you have selected the correct TV input. You should see the following image. This is the image that the DVD player gives whenever there is no disc playing.

To protect your screen from damage caused by persistent static images, a 'screen saver' facility activates after a few minutes of inactivity.

Using the Set-up menus

If you have not already done so, now would be a good time to fit the two AAA batteries in the remote handset, taking care to get them the correct way round. Select 'DVD' using the **CD/DVD** button on the remote control.

Ensure that no disc is playing and press **SETUP** on the remote control: a menu appears on the TV screen.

The Set-up menu comprises four pages of options. The top line of each page shows the page title, indicating the nature of the settings controlled by the page. To make a change, first use the **UP/DOWN** controls to highlight the item. Once the item to be changed has been highlighted, press **RIGHT** to open the list of options for the menu item. The current option for the menu item is shown highlighted; the **UP/DOWN** controls can be used to select the new option, then pressing **LEFT** confirms the selection and closes the option list.

To change page, highlight the page bar at the top of the screen and use the **LEFT/RIGHT** controls to move through the pages.

In the 'Setup' menu, the **UP/DOWN** controls 'wrap around', so that with the highlight bar at the bottom of the screen, pressing **DOWN** takes the bar to the top of the screen.

Operational setup

Operation 1/4	
OSD Language	English
DVD Menu	English
Subtitle	English
Audio	English
Remote type	CR-314
OSD Status	On
Priority	Not applicable

ARCAM
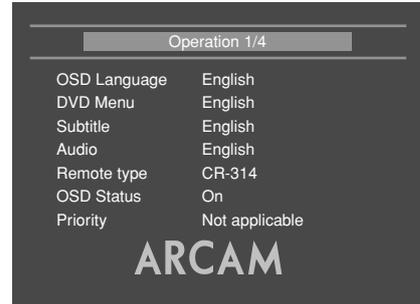
OSD Language

This setting controls the language of the messages displayed on the On-Screen Display (OSD). The default language is English, with three other languages supported.

Note that this setting does not change the language of any information displayed on the front panel, which is always in English.

DVD menu

Some DVD discs support a number of different languages for the DVD disc menu (the menu present on the DVD itself). This setting allows the preferred language to be specified. For example, if this item is set to 'French' then disc menus will be displayed in French, where supported by the disc.

Note that not all discs will have your preferred language available.

Subtitle

This setting controls the subtitles displayed on the TV.

Off	No Subtitles
Auto	Subtitles for the primary language on the disc
Closed Caption	'Closed Caption' information from the disc (if present) is sent to the TV
English	English subtitles
French	French subtitles, etc. (six languages are supported)

Note that some discs may force the subtitles to be displayed regardless of how the Subtitle item is set.

Closed Caption information is displayed only if the 'Closed Caption' option is selected, closed caption information is present on the disc, and your TV supports closed caption decoding.

The default setting for Subtitle is 'Off'. Alternatively, choose the setting for the language you prefer. Note that not all discs will have your preferred language available as a subtitle.

Audio

This controls the default audio track, when there is more than one audio track present.

English	English language, if available
French	French language, if available, etc. (six languages are supported)

The default setting is 'English'. Choose the setting you would like as default. Note that the Audio preference setting is not respected by all discs, which may impose their own default choice.

Remote type

This informs the player which type of remote control you are using, so that the player can take into account the slight differences between the remote types. For ARCAM remote controls, the remote type is always written on the front of the remote control, normally at the bottom of the unit.

CR-314	This selects the grey ARCAM CR-314 remote control
CR-415	This selects the grey ARCAM CR-415 remote control
CR-80	This selects the black ARCAM CR-80 learning remote control
CR-9000	This selects the black ARCAM CR-9000 learning remote control
Other	A non-ARCAM learning remote control is being used

It is important to choose 'Other' if the learning remote in use does not support RC-5 'toggle bits'.

OSD (On Screen Display)

This setting controls the 'pop up' messages that appear on screen.

On	Pop-up messages are enabled
Off	No pop-up messages, only menus when required.

Certain messages, such as 'No Disc' are always shown regardless of how this is set.

Priority

This item is not applicable for the DV78, and should not be changed.

Video setup

TV shape

This needs to be set correctly for the type of TV you have and the type of display you prefer.

4:3 Letterbox	Use this setting if you have a conventional 4:3 TV, and you prefer to view wide screen movies in letterbox format (with black bars at the top and bottom)
4:3 Panscan	Use this setting if you have a conventional 4:3 TV, and you prefer to view wide screen movies in Pan & Scan format (cropping the sides of the image)
16:9	Use this setting if you have a wide screen (16:9) TV. Material in 16:9 format is displayed so as to fill the screen.

If you have a 4:3 TV and you have set a preference for Panscan, it does not mean you will always see movies in this format, since the Panscan display must be supported on that disc.

TV System

This is set at the factory to be appropriate for the type of TV used in your country. Should you need to change this setting, the options are explained below.

Auto	The video output is taken from that recorded on the disc. When no disc is playing, the logo screen is displayed using the standard of the last disc played.
NTSC	NTSC is always used as the video standard. Note that PAL discs are converted to NTSC, but this causes some reduction in the quality of the video output (and may cause the video to become 'jerky'). This is the best setting to use if your TV can accept only NTSC video (this is generally the case in North America); better results are obtained by using 'Auto', but your TV must be able to support PAL.
PAL	PAL is always used as the video standard. Note that NTSC discs are converted to PAL, but this causes some reduction in the quality of the video output (and may cause the video to become 'jerky'). Better results will be obtained by using 'Auto', but your TV must be able to support NTSC.

Progressive

Off	The video output will always be interlaced (standard definition video). Use this setting if your display device does not support progressive scan.
Auto (525)	The component video output will switch to progressive scan mode whenever the output standard is NTSC (525). This would be whenever an NTSC disc is played, or whenever 'TV System' is set to NTSC. The video output will revert to interlaced (standard definition) for PAL (625) modes. Use this setting only if your display device supports progressive scan.
On (625/525)	The component video output will output progressive scan video for both PAL and NTSC discs. Use this setting only if your TV supports progressive scan in both PAL and NTSC formats.

NOTE: When progressive scan is active, the component video output will be in progressive mode, and the other video outputs (composite and S-Video) are muted.

Since progressive scan must be component, not RGB, the 'HQ video setting' will be forced to component if progressive scan is enabled.

Not all displays support progressive scan. If you accidentally enable progressive scan and your display does not support it, you will be unable to view the picture from the DVD player, including the on screen display required to change the video settings. To revert to interlaced mode without using the on screen menus, press and hold the **STOP** button on the front panel at any time. The video mode will revert to interlaced mode after the button has been held in for five seconds.

HQ Video (High Quality Video)

This setting controls the type of video given out on the Component and SCART video outputs. It is set at the factory to be appropriate for the type of TV used in your country, so it is best not to change it. If it gets set incorrectly then the picture shown on the TV will have strange colouring.

Component	The video output on both the Component video (3 phonos) and SCART is Y, Pb, Pr component video.
RGB SCART	The video output on both the Component video (3 phonos) and SCART is RGB. Note that if you are using RGB output via phono connectors, you will also need to use **COMPOSITE** as a sync signal.

NTSC black (Pedestal)

This setting controls the 'pedestal' signal or black level when the NTSC video standard is used. Note that it does not affect PAL video in any way.

0 IRE	This removes the pedestal from NTSC video. This setting should be used in Japan, and also if you are using RGB video, whatever the country.
7.5 IRE	This is the standard pedestal level that should be used in all countries that use NTSC video, with the exception of Japan.

Audio setup
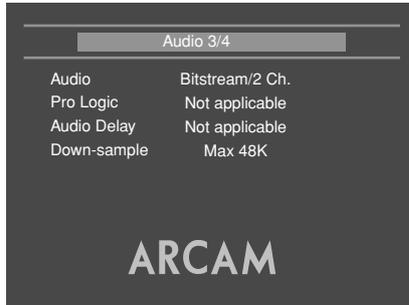
This section allows you to configure the type of analogue and digital audio outputs. In particular, the digital output type needs to be set correctly if you are using an external audio decoder, receiver or D-A converter.

Audio

Two different types of digital output are supported: 'Bitstream' and 'PCM'.

Bitstream	This setting supports the following audio standards: ■ 2 channel PCM (on CDs or DVDs) ■ Dolby Digital ■ MPEG multi channel ■ DTS multi channel. Use the Bitstream setting if you have an external decoder that supports Dolby Digital.
PCM	When the 'PCM/2Ch' digital output is selected, all audio material played is down-mixed to stereo and output as stereo PCM. Use this setting if you have an external D-A converter that supports only 2-channel PCM.

Note that the analogue output is muted when a DTS soundtrack is played, since DTS is not decoded.

Pro Logic

This item is not applicable for the DV78, and should not be changed.

Audio delay

This item is not applicable for the DV78, and should not be changed.

Down-sample

This needs to be set correctly if you are using an external audio decoder, receiver or D-A converter.

Max 96K	Choose this option if your external audio decoder is able to process digital audio with a sample rate of up to 96kHz, or if you are not using the digital audio outputs. This is the maximum sample rate present on DVD-video discs.
Max 48K	Choose this option if your external audio decoder is unable to process digital audio with a sample rate of up to 96kHz.

Note that this setting is relevant only to the output from DVD-video discs.

Access setting
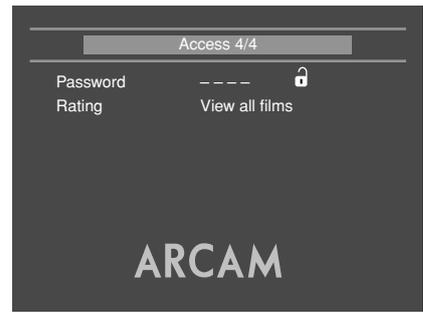
Password

The password setting works in conjunction with the rating setting (the next menu item) to provide a means of limiting content playback by children (parental control).

You will see there are four dashes and a padlock symbol. Normally the padlock symbol will be open and this means the parental control is unlocked. Under this condition the rating setting may be freely changed.

To lock the parental control, choose a suitable four digit number. Don't forget your password as you will need to know it to unlock the player. Highlight 'Password' and enter your four digit number using the numerical keys on the handset.

When all four digits have been entered, press **OK** on the handset. The player is now locked and you will not be able to change the rating setting.

To unlock the parental control, highlight 'Password' and enter your four digit number, followed by **OK**.

NOTE: You can change the password any time you lock the player.

Rating

The rating setting is used in conjunction with the password to restrict the content of DVD titles that may be played. To change this setting the parental control must be unlocked.

The term '**Parental level**' refers to a standard defined for DVDs. DVD movies may have a parental level between 1 and 8. Note that this only applies to DVD video discs that have the parental level correctly implemented. Some DVD video titles do not respond to parental control settings, and Video CDs have no mechanism for parental control.

View All	Titles of all parental levels will be played
No Adult	Only material of parental level 4 or less may be played. This corresponds to the MPAA (Motion Picture Association of America) rating of PG-13
Kids Only	Only material of parental level 1 may be played. This corresponds to MPAA rating G.

Once the rating level has been set, DVD titles with parental level higher than the setting will not play. Sometimes DVD video titles may be produced that have the parental level set for specific scenes, so a disc will play but skip or substitute certain scenes.

Completing the set-up

Complete the setup procedure by pressing **SETUP** on the remote control. This saves all the data and closes the setup menu. You can press **SETUP** at any time while in a menu to quit from it.

To return to the setup menu at any time, ensure that there is no disc playing and press the **SETUP** button.

Basic use of your DVD player
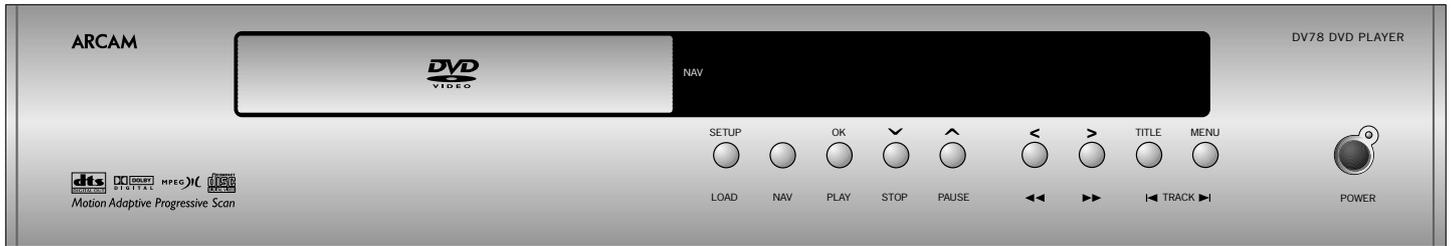
Introduction

'Basic operation' explains how to play a DVD, CD or other type of disc, including the use of the remote control.

More sophisticated features – such as special playback modes and programming jumps and playback sequences – are described in the 'Advanced features' section.

Front panel controls

Switching on

Switch the unit on by pressing the **POWER** button. The status LED glows green when the unit is powered up and red when in standby mode (standby is operated from the remote control).

Note that the remote control sensor is located on the right hand side of the display window. Do not obstruct this or the remote will not work.

Playing a disc

Loading a disc

Press **LOAD** on the front panel (or **OPEN** on the handset) and place the disc on the tray, with the playback side facing down. Some discs are double sided, in which case the side labelled 'side A' should face up, to access side A.

Press **LOAD** on the front panel to close the tray. The disc loads after a pause of a few seconds.

Playing a disc

Most DVDs begin playing automatically, but some titles begin by displaying a menu. Select the menu item 'Play movie' (or similar) using the cursor pad, then press **OK** to start playback.

For discs that do not play automatically (including CDs and VCDs), press **PLAY**.

Note that when playing DVDs, the drive mechanism operates at much higher speeds compared with CDs and so may produce more noise when loading and playing initial chapters. This is normal.

Fast play

Press ►► or ◄◄ on the front panel or remote control to play fast forward or backwards. For DVDs, VCDs and CDs the following speeds for fast playback are available: x2, x4, x8, x20, x60 and x100. Press the button repeatedly to cycle through the different speeds. To resume normal playback speed, press **PLAY**.

Fast playback is not available for MP3 discs.

Skipping chapters/tracks

To skip chapters (or tracks on a CD), press ►I or I◄.

When skipping back, the first button press takes you to the beginning of the current chapter. Pressing the button again takes you to the start of the previous chapter.

Note that it is common for Video CDs to have only one track.

Pausing playback

Press **PAUSE** on the front panel or II on the remote control to pause playback. To resume playback, press **PLAY** on the front panel or ► on the handset.

Stopping playback

Press the **STOP** button on the front panel or ■ on the remote control to stop playback.

When playing a DVD, pressing **STOP** once performs a 'resume stop'. If you now press **PLAY**, playback resumes from the point it was stopped.

If you press **STOP** twice, this is a 'complete stop', and playback resumes from the beginning of the disc.

Front panel menu navigation

If desired, it is possible to navigate disc and player menus using the front panel buttons; to this end, the **NAV** button is provided.

Pressing the **NAV** button causes the player to enter 'navigator' mode, indicated by the 'NAV MODE' LED being illuminated. In this mode, the front panel buttons take on the functions illustrated above each button, for example the **STOP** and **PAUSE** buttons become **DOWN** and **UP**.

To exit navigtor mode, press the **NAV** button for a second time.

Using the CR-314 remote control

CD/DVD

Ensure that DVD mode is selected using the **CD/DVD** toggle button. The 'DVD' LED above the **CD/DVD** button is lit briefly when DVD mode is selected.

DISP (display)

Dims or turns the DV78's display on or off. Turning the display off generally gives a slight improvement in sound quality.

Pressing **DISP** once turns the display off; twice dims the display. To restore the display to full brightness, press **DISP** a third time.

A–B

This button enables you to repeat a selected section from the disc (see page 16).

RPT (repeat)

Press **RPT** to cycle through the repeat play options.

Fast play and Skip chapter/tracks

Play fast (◀◀ ▶▶) and Skip (◀◀ ▶▶) chapters/tracks in both directions (see page 11).

OPEN

Opens and closes the disc tray.

Playback control

Pause (❙❙), Play (▶) and Stop (■) (see page 11).

Advanced controls

These buttons are described on the facing page.

0–9 keypad

This allows direct access to individual tracks on audio CDs. To select a track, press the corresponding keypad button followed by **OK**. For tracks greater than 9, enter the digits in sequence. For example, to play track 15, press **1**, then **5**, then **OK**.

Standby

Press **Standby** to toggle the standby state of the DVD player. Note that Arcam CD players are not controlled by this button.

CLEAR

Use **CLEAR** within the 'Program' and 'Bookmark' menus to clear a numeric field (see pages 16–17).

PROG (program)

You can program a selection of up to 20 chapters/tracks from a disc to play in any order. Press **PROG** to access the 'Programme' menu (see pages 17 and 19).

Slow play

Press **>** or **<** on the remote control to play slow forward or backwards. There are four speeds of slow playback: 1/5, 1/4, 1/3 and 1/2. Press the button repeatedly to cycle through the different speeds. To resume normal playback speed, press **PLAY**.

Note that slow play does not apply to audio CDs.

Cursor pad and OK button

Use the cursor pad to navigate the On Screen Display (OSD) and menu pages. Confirm your selection with the **OK** button.

MUTE

Stops sound to the speaker outputs of certain Arcam amplifiers.

Volume +/−

Adjusts the volume on Arcam remote-controllable amplifiers.

Note that the volume (**+/−**) controls and **MUTE** button have no effect on the audio output level of the DVD players.

NOTE: Remember to install the two AAA batteries supplied before trying to use your remote control.

Do not place anything in front of the display area on the DVD player (where the IR receiver is located), or the remote control may not work.

Advanced controls (CR-314)

MEM (memorise)

It is possible to 'bookmark' up to three points on a DVD title, so you can quickly jump to those parts of the title again. Press **MEM** to access the 'Bookmark' menu.

SUBT (subtitle)

Press **SUBT** on the remote control to cycle through the available subtitle languages, including 'OFF'. Some discs force subtitles on, over-riding player set up.

TITLE

Press **TITLE** to access the DVD's 'Title' menu. Note that this feature only applies to multi-title discs.

MENU

Press **MENU** to access the DVD 'Disc' menu.

This navigation menu is specific to a disc and varies for each title, but typically offers facilities to select chapters, languages, and view extra material such as trailers or documentaries.

Once the menu has been accessed, use the cursor pad to move around the menu and press **OK** to activate a menu 'button'.

P MODE

Press **P MODE** to toggle random playback

ZOOM

Press **ZOOM** to enlarge a particular area of the picture. Each press of the **ZOOM** button increases the zoom, normally until a maximum of 4x enlargement is reached (although the amount of zoom possible varies depending on the type of disc: in some cases no zooming is possible). Pressing **ZOOM** when the maximum enlargement has been reached returns the image to normal size.

While using the zoom function, the cursor pad can be used to move around within the image. The zoom function can also be used when playback is paused.

Note that a zoom level of x1.25 is particularly useful if the output from the DVD player is in a screen format different from that of your TV. A zoom of x1.25 when a 'widescreeen' image is displayed on a 4:3 TV causes the bars at the top and bottom of the screen to disappear (although the sides of the image are lost); a zoom of x1.25 when a 4:3 image is displayed on a widescreen TV causes the bars at the side of the image to disappear (although the top and bottom of the image are lost).

RTN (return)

Press **RTN** to move back through the DVD 'Disc' and 'Title' menus. Note that this feature is only of use with discs using multi-level menus.

SRCH (search)

It is possible to access any point on the disc directly using the 'Search' menu.

Press **SRCH** to access the 'Search' menu.

ANGLE

Some DVDs offer the facility to select different camera angles. If this feature is available the 'camera' symbol lights in the display.

Press **ANGLE** to cycle through the available angles.

STATUS

Press **STATUS** once to show the elapsed and remaining time of the disc. Press **STATUS** a second time to give play status information about the current disc. Press **STATUS** a third time to close the status display.

The status information displayed varies depending on the type of disc – DVD, CD or VCD.

SETUP

'Setup' allows you to configure the DV78 for use in your system. Ensure that no disc is playing and press **SETUP** to access the 'Setup' menu.

AUDIO

Some DVDs offer the facility to select different audio tracks. Press **AUDIO** to cycle through the available tracks.

The TV displays the number, language and type of audio track, e.g. '1 Eng DD 6CH'.

Using the CR-415 remote control
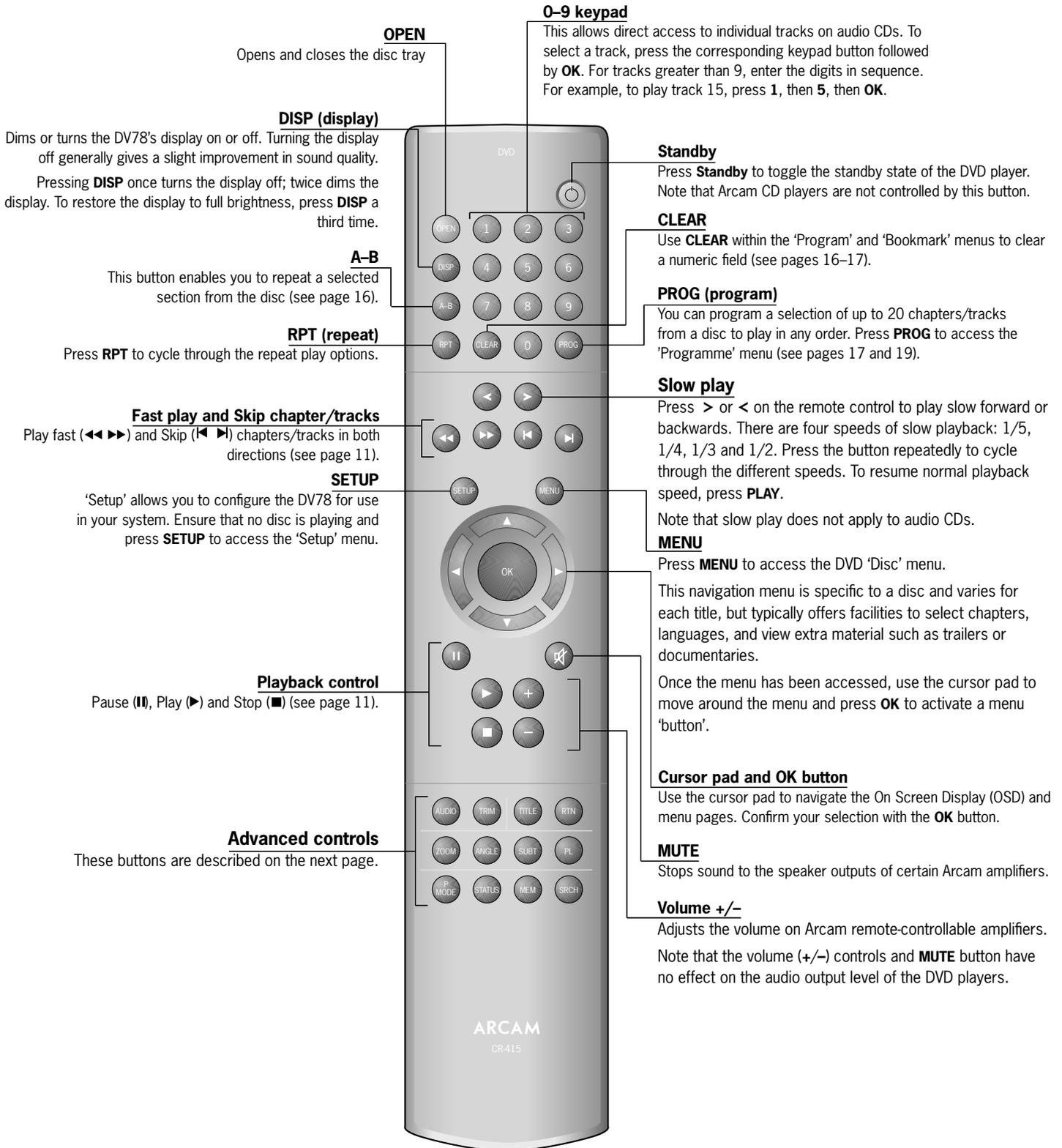
OPEN

Opens and closes the disc tray

0–9 keypad

This allows direct access to individual tracks on audio CDs. To select a track, press the corresponding keypad button followed by **OK**. For tracks greater than 9, enter the digits in sequence. For example, to play track 15, press **1**, then **5**, then **OK**.

DISP (display)

Dims or turns the DV78's display on or off. Turning the display off generally gives a slight improvement in sound quality.

Pressing **DISP** once turns the display off; twice dims the display. To restore the display to full brightness, press **DISP** a third time.

Standby

Press **Standby** to toggle the standby state of the DVD player. Note that Arcam CD players are not controlled by this button.

CLEAR

Use **CLEAR** within the 'Program' and 'Bookmark' menus to clear a numeric field (see pages 16–17).

A–B

This button enables you to repeat a selected section from the disc (see page 16).

PROG (program)

You can program a selection of up to 20 chapters/tracks from a disc to play in any order. Press **PROG** to access the 'Programme' menu (see pages 17 and 19).

RPT (repeat)

Press **RPT** to cycle through the repeat play options.

Slow play

Press **>** or **<** on the remote control to play slow forward or backwards. There are four speeds of slow playback: 1/5, 1/4, 1/3 and 1/2. Press the button repeatedly to cycle through the different speeds. To resume normal playback speed, press **PLAY**.

Note that slow play does not apply to audio CDs.

Fast play and Skip chapter/tracks

Play fast (◄◄ ►►) and Skip (◄◄ ►►) chapters/tracks in both directions (see page 11).

MENU

Press **MENU** to access the DVD 'Disc' menu.

This navigation menu is specific to a disc and varies for each title, but typically offers facilities to select chapters, languages, and view extra material such as trailers or documentaries.

SETUP

'Setup' allows you to configure the DV78 for use in your system. Ensure that no disc is playing and press **SETUP** to access the 'Setup' menu.

Once the menu has been accessed, use the cursor pad to move around the menu and press **OK** to activate a menu 'button'.

Playback control

Pause (❚❚), Play (►) and Stop (■) (see page 11).

Cursor pad and OK button

Use the cursor pad to navigate the On Screen Display (OSD) and menu pages. Confirm your selection with the **OK** button.

MUTE

Stops sound to the speaker outputs of certain Arcam amplifiers.

Advanced controls

These buttons are described on the next page.

Volume +/−

Adjusts the volume on Arcam remote-controllable amplifiers.

Note that the volume (**+/−**) controls and **MUTE** button have no effect on the audio output level of the DVD players.

ARCAM
CR-415

NOTE: Remember to install the two AAA batteries supplied before trying to use your remote control.

Do not place anything in front of the display area on the DVD player (where the IR receiver is located), or the remote control may not work.

Advanced controls (CR-415)

SUBT (subtitle)
Press **SUBT** on the remote control to cycle through the available subtitle languages, including 'OFF'. Some discs force subtitles on, over-riding player set up.

TRIM
This item is not applicable to the DV78

TITLE
Press **TITLE** to access the DVD's 'Title' menu. Note that this feature only applies to multi-title discs.

AUDIO
Some DVDs offer the facility to select different audio tracks. Press **AUDIO** to cycle through the available tracks.

The TV displays the number, language and type of audio track, e.g. '1 Eng DD 6CH'.

RTN (return)
Press **RTN** to move back through the DVD 'Disc' and 'Title' menus. Note that this feature is only of use with discs using multi-level menus.

ZOOM
Press **ZOOM** to enlarge a particular area of the picture. Each press of the **ZOOM** button increases the zoom, normally until a maximum of 4x enlargement is reached (although the amount of zoom possible varies depending on the type of disc: in some cases no zooming is possible). Pressing **ZOOM** when the maximum enlargement has been reached returns the image to normal size.

While using the zoom function, the cursor pad can be used to move around within the image. The zoom function can also be used when playback is paused.

Note that a zoom level of x1.25 is particularly useful if the output from the DVD player is in a screen format different from that of your TV. A zoom of x1.25 when a 'widescreeen' image is displayed on a 4:3 TV causes the bars at the top and bottom of the screen to disappear (although the sides of the image are lost); a zoom of x1.25 when a 4:3 image is displayed on a widescreen TV causes the bars at the side of the image to disappear (although the top and bottom of the image are lost).

PL (PRO LOGIC)
This button does not apply to the DV78

SRCH (search)
It is possible to access any point on the disc directly using the 'Search' menu.

Press **SRCH** to access the 'Search' menu.

P MODE
Press **P MODE** to toggle random playback

MEM (memorise)
It is possible to 'bookmark' up to three points on a DVD title, so you can quickly jump to those parts of the title again. Press **MEM** to access the 'Bookmark' menu.

STATUS
Press **STATUS** once to show the elapsed and remaining time of the disc. Press **STATUS** a second time to give play status information about the current disc. Press **STATUS** a third time to close the status display.

The status information displayed varies depending on the type of disc – DVD, CD or VCD.

ANGLE
Some DVDs offer the facility to select different camera angles. If this feature is available the 'camera' symbol lights in the display.

Press **ANGLE** to cycle through the available angles.

Advanced DVD and VCD features

This section explains the more sophisticated DVD and VCD features, such as special playback modes. The operations described here are not exactly the same for DVDs and VCDs, but are similar enough to make it appropriate to group them together.

Note that many VCDs have a single track, so some operations involving tracks will not be relevant.

Jumping to a particular point

Press the **SRCH** button on the remote control to open the 'Search' menu:

```
                          00:56:10  00:56:12

          Search
          Time:           -:--:--
          Title/Chapter:  01 27
```
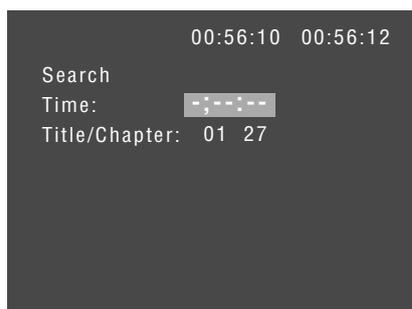
If the disc is playing, then the elapsed and total times on the disc are shown in the top right of the page.

A jump can be performed using different specifiers: jump to a particular time or to a specified chapter/track on the disc.

Time

Highlight the 'Time' field and enter the time in hours, minutes and seconds, then press **OK**. The Search menu is removed from the screen and playback starts from the time specified. Invalid time entries are ignored.

Title/Chapter

(Applies to DVDs only) To jump to a title or chapter, highlight the title/chapter position and enter the number of the title/chapter to jump to, before pressing **OK**. It is possible to jump to a chapter within a different title to the current one by entering a value into both fields. Note that specifying a title without a chapter will jump to the first chapter in the title.

Track

(VCDs only) To jump to a specified track on a VCD, enter the track number in the 'Track' field, then press **OK**. Note that many VCDs have only one track.

Closing the Search menu

When displayed, this menu screen can be closed again by pressing the **SRCH** button (which also has the effect of cancelling the search).

Special playback modes

Playback modes are available that allow repeat, shuffle and programmed playback.

Repeat

Press the **RPT** button on the remote control to cycle through the repeat options. For DVDs, a chapter or title repeat may be selected (i.e. play continuously the current chapter or the current title). For VCDs, a track or disc repeat is available.

When a chapter/track repeat is selected, the loop symbol on the front panel display is illuminated and the current chapter/track is repeated. If a title/disc repeat is selected, the loop symbol and 'ALL' are illuminated and the current title/disc is repeated.

To cancel repeat, press the **RPT** button until 'Repeat: Off' is displayed.

Shuffle

Press the **P MODE** button on the remote control to to switch shuffle play on.

The 'RAND' (random play) indicator shows on the display, and the chapters/tracks are played in random order.

To cancel random play, press the **P MODE** button for a second time.

Peforming an A-B repeat

The DV78 can repeat a specific section of a DVD or VCD; this is called an A-B repeat.

To perform an A-B repeat, wait until the disc is at the point where you want the repeat to start, then press **A-B**. The TV display shows a repeat symbol, followed by 'A–', and the front panel shows 'A–'.

Press **A-B** again at the point you want the repeat to end. The repeat symbol, followed by 'A-B' is shown on the TV monitor, and the front panel shows 'A-B'. The selected section is repeated in a loop.

To cancel the A-B repeat, press **A-B** again. An 'Off' message is displayed on the TV monitor.

To program a special sequence

Press **PROG** on the remote control to open the 'Programme' menu. Note that playback must be stopped first.

DVD

The bottom of the screen shows the number of titles present on the disc, together with the number of chapters in the title selected currently (or the first title if no title has yet been specified). Below this is an information line, giving relevant information for the cursor position.

```
                      Play          Clear All
   1: – –    6: – –    11: – –    16: – –
   2: – –    7: – –    12: – –    17: – –
   3: – –    8: – –    13: – –    18: – –
   4: – –    9: – –    14: – –    19: – –
   5: – –   10: – –    15: – –    20: – –

            2  Title(s) on this disc.
           27 Chapter(s) in this title.

                Enter title number.
```

You can enter a sequence of up to 20 title/chapter combinations for programmed playback. If you enter data that is invalid for the current disc, the field is erased automatically.

A number of aids have been built in to the programme menu to make it easier to use. These are best illustrated by an example. Let's assume that you want to play chapters 5, 7, 9, 4, 8, 3, and 1 (in that order) of title 1, then all of title 2.

```
                      Play          Clear All
   1: 1 5    6: 1 3    11: – –    16: – –
   2: 1 7    7: 1 1    12: – –    17: – –
   3: 1 9    8: 2 All  13: – –    18: – –
   4: 1 4    9: – –    14: – –    19: – –
   5: 1 8   10: – –    15: – –    20: – –

            2  Title(s) on this disc.
           27 Chapter(s) in this title.

                Enter title number.
```
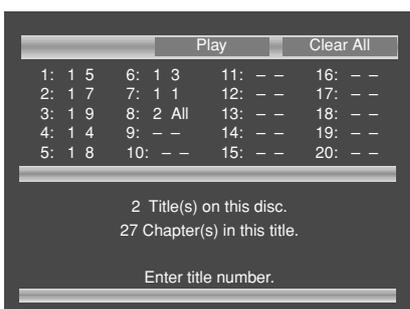
First, highlight the title position for the first programmed item (as shown in the screen above). Then press the number **1** on the remote control: '1' is shown in the position. Using the remote control, press ▶ to highlight the chapter position. The message at the bottom of the screen changes accordingly, prompting you for the required information. Press **5** on the remote handset.

Since we have a number of chapters all from the same title, it would be a lot of work to have to enter the title number each time. Press ▼ on the remote handset. Notice that the player assumes that the title number remains the same for this entry as for the previous one. Enter the remaining chapter numbers, pressing ▼ after each one. (Note that pressing ▼ at the bottom of a column places the cursor at the top of the next column.)

Next, we want to specify all of title 2. For this, highlight the title position of the next entry (entry 8) and enter the number **2**, indicating title 2. Highlight the chapter position and, without entering any number, press ▼. The player fills in the text 'All' to indicate that all the chapters in title 2 will be played.

VCD

The bottom of the screen shows the number of tracks present on the disc. Below this is an information line, giving relevant information for the cursor position.

You can enter a sequence of up to 20 tracks for programmed playback. If you enter data that is invalid for the current disc, the field is erased automatically.

To program the player, highlight the first entry (using the cursor pad on the remote control), then press the number of the track you want to play first. To enter a second track, move down, then type the number of the second track to play, etc. To enter a track number greater than 9, press the two digits sequentially (e.g., for track 10, first press **1**, then press **0**).

General

To play the programme you have entered, highlight the 'PLAY' button on the screen and press **OK**. The 'PROG' indicator shows in the display and the programmed sequence begins.

If you make a mistake while programming, you can clear a single field by highlighting it and pressing **CLEAR**. To clear all the fields at once, highlight the 'CLEAR ALL' button on the screen and press **OK**.

To stop the programmed sequence and return to normal playback, select the **PLAY** button in the programme menu with no programme specified. This clears the programme mode and cause normal playback order to be resumed.

Note that skipping forward or back through tracks while in programmed play mode skips through the programmed sequence.

Advanced MP3/WMA/JPEG and audio CD features

The DV78 DVD player has the ability to handle MP3, WMA and JPEG files, when these are burned on to a CD-R or CD-RW disc. Picture/Photo CDs are also playable. These file types may be mixed together, if desired.

This section explains the more sophisticated CD-based features, for audio CDs and for CD-ROM discs containing MP3, WMA and JPEG files. The operation for audio-CDs and other CD-ROMs is very similar, except that CD-ROMs can have directories and sub-directories, while audio-CDs do not have a directory structure.

In this section of the document, we use the term 'CD-ROM' to refer to a CD-R or CD-RW disc containing MP3, WMA or JPEG files, and including Picture/Photo CDs.

All of these advanced features use on-screen menus, so a TV monitor is required.

Screen layout

When an audio-CD or CD-ROM is detected by the DVD player, the disc navigator screen is displayed.
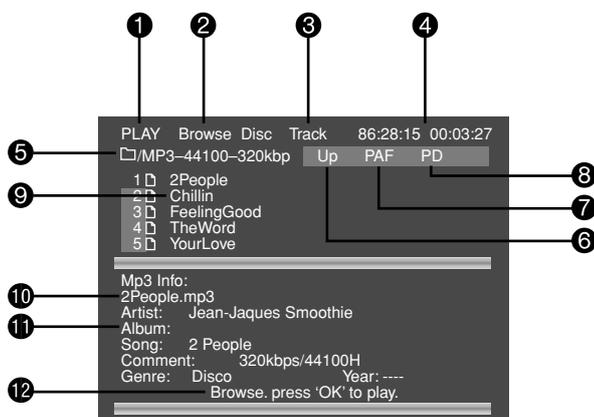
The screen shown above is the disc navigator screen, in this example showing a CD-R containing MP3 files. The following items can be identified:

❶ The user command indicator.

❷ The mode of the player. This is described in more detail below.

❸ The current track number and the total number of tracks in this directory (for CD-ROMs), or on the whole disc (for audio-CDs).

❹ The playback time of the current track, and the total playback time.

❺ For CD-ROMs, this area shows the current directory.

❻ 'Up' – for CD-ROMs, selecting this button changes directory to one level above the current one. This button is not shown for audio-CDs, or if the current directory is at the top level.

❼ 'PAF' – Play All Files on the disc. Starting from the first valid file/track, all valid files/tracks on the disc are played, in the order found.

❽ 'PD' – Play Directory. (CD-ROMs only). Starting from the first valid file in the current directory, all the (valid) files in the current directory are played.

❾ The names of the tracks in this directory. For audio-CDs, the text 'Track 1', etc., is shown here. For CD-ROMs, the text shown here is based on the file name of the track.

❿ When playing CD-ROMs, the full name of the file being played is displayed here (subject to screen space).

⓫ When playing CD-ROMs, tag information from MP3 and WMA files is displayed here, if present on the disc.

⓬ Helpful messages to the user are displayed here. When the disc is loaded, the PAF button (**❼**) is highlighted. This means that loading the disc and pressing **PLAY** or **OK** is enough to set the disc playing.

Player mode

When playing audio-CDs or CD-ROMs, the player can be in one of three modes:

Browse mode: the user is free to navigate around the disc directory structure (while playback is stopped). Valid files/tracks in each directory (audio-CD tracks or files that can be played) are displayed on the screen. Pressing **PLAY** while the cursor is on a valid file/track will start playback from that point, continuing to the end of the disc. Alternatively, the 'PD' or 'PAF' buttons can be used to start playback.

Programme mode: Press **PROG** on the remote control to enter 'Programme' mode to choose the order in which the files/tracks are played. Playback must be stopped first. 'Programme' mode operates differently for audio-CDs and MP3 discs, and is explained on page 19.

Playlist mode: The player is in this mode when a programmed sequence of files/tracks is being played. No navigation of the disc may be performed in this mode; the player starts at the beginning of the programmed playlist and plays through to the end.

Browsing the disc (Browse mode)

By default, the disc navigator is in 'Browse' mode. In this mode, the user can navigate around the disc (using the cursor pad for direction and 'OK' to select an option). When a file/track is highlighted, the tag information for that file (if available) is displayed in the lower portion of the screen. Use the 'Up' button to move to a higher-level directory; to enter a lower-level directory, press **OK** when the directory name is highlighted.

At any time, press **PLAY** or **OK** to begin playback from the file/track highlighted currently. Navigation around the current directory is possible during playback, but playback stops automatically if you attempt to navigate out of the current directory. Please note the following:

- Fast forward and fast rewind do not work with MP3 or WMA playback.
- Skipping forward past the end of a directory with CD-ROMs causes playback to continue from the next directory containing valid files. Skip-back can be performed only as far as the beginning of the current directory.
- Directory trees may be up to 10 directories deep.
- Long file names, of up to 64 characters (Joliet standard), are supported.
- Only sample rates of 44.1kHz and 48kHz are supported for MP3 and WMA files.
- For MP3 playback, the following constant bit rates are supported: 32, 64, 80, 96, 112, 128, 160, 192, 256 and 320 kilobits per second. Variable bit rate (VBR) between 96kb/s and 320kb/s is also supported.
- For WMA playback, the following constant bit rates are supported: 48, 64, 80, 96, 128, 160 and 192kb/s.
- CD-ROM discs may contain files other than MP3, WMA or JPEGs, but these are not displayed on the screen.

Because of differences in the many MP3 and WMA encoders available, we recommend that you conduct a test recording before transferring large numbers of MP3 files to CD-R or CD-RW for subsequent playback on the DV78.

Programmed playback (Audio CDs)

Press **PROG** on the remote control to open the 'Programme' menu. Playback must be stopped first.
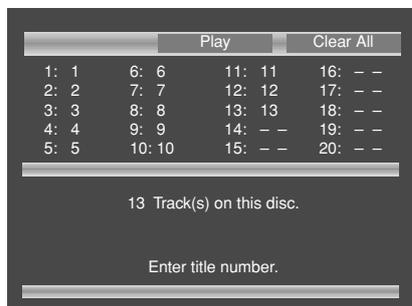
		Play	Clear All
1: 1	6: 6	11: 11	16: – –
2: 2	7: 7	12: 12	17: – –
3: 3	8: 8	13: 13	18: – –
4: 4	9: 9	14: – –	19: – –
5: 5	10: 10	15: – –	20: – –

13 Track(s) on this disc.

Enter title number.

The bottom of the screen shows the number of tracks present on the disc. Below this is an information line, giving relevant information for the cursor position.

You can enter a sequence of up to 20 tracks for programmed playback. If you enter data that is invalid for the current disc, the field will be erased automatically.

To program the player, highlight the first entry (using the cursor pad on the remote control), then press the number of the track you want to play first. To enter a second track, move down, then type the number of the second track to play, etc. To enter a track number greater than 9, press the two digits sequentially (e.g., for track 10, first press **1**, then press **0**).

To play the programme you have entered, highlight the **PLAY** button on the screen and press **OK**. The 'PROG' indicator shows on the front panel display and the programmed sequence begins.

If you make a mistake while programming, you can clear a single field by highlighting it and pressing **CLEAR**. To clear all the fields at once, highlight the 'CLEAR ALL' button on the screen and press **OK**.

To stop the programmed sequence and return to normal playback, select the 'PLAY' button in the programme menu with no programme specified. This clears programme mode and causes normal playback order to be resumed.

Note that in programmed playback mode, skipping track forward or back skips forward or back through the programmed sequence.

The player returns to 'Browse' mode if no programme has been entered when **PROG** is pressed for a second time.

Programmed playback (CD-ROM)

Pressing the **PROG** button on the remote control stops playback (if active) and changes the player mode to 'Programme' mode (as indicated at point (2)).

Navigating the directory tree is the same as described earlier for 'Browse' mode. Files from any location on the disc may be added to the playlist by moving the cursor to the file, then pressing **OK** on the remote control. Files that are present in the playlist are shown with a light blue highlight.

To remove a file from the playlist, move the cursor to the file and press **OK**. The blue highlight disappears from the file, indicating that the file is no longer in the playlist. To remove all files from the playlist, press **CLEAR** on the remote control.

When you have entered the programme to your satisfaction, press the **PROG** button again. This changes the display to show the programmed list ('Playlist' mode) and playback starts automatically.

Playback can be stopped and started using the **STOP** and **PLAY** keys, as normal. To stop the programmed sequence and return to normal playback, press the **PROG** button for a third time; this stops playback and changes the player to 'Browse' mode.

Shuffle and Repeat

Note that this section is valid for audio-CDs only.

Repeat

Press the **RPT** button on the remote control to cycle throught the repeat options. 'Track' or 'Disc' (i.e. all) repeat are available.

When a track repeat is selected, the loop symbol on the front panel display is illuminated and the current track is repeated. If a disc repeat is selected, the loop symbol and 'ALL' are illuminated and the entire disc is repeated.

To cancel repeat, press the **RPT** button until the Repeat symbols on the front panel display are no longer illuminated.

Shuffle

Press the **P MODE** button on the remote control to activate shuffle play.

The 'RAND' (random play) indicator shows on the display, and the tracks are played in random order.

To cancel random play, press the **P MODE** button for a second time.

Note that Repeat and Shuffle cannot be set at the same time.

NOTE: If a programmed sequence is shuffled using the **P MODE** button on the remote control, pressing **P MODE** again will not 'unshuffle' the programme.

Reference: Troubleshooting

Problems with remote controls

Problem	Possible cause	Solution
Remote control not working	DVD not selected (CR-314)	Select DVD using the remote's CD/DVD toggle switch
	Batteries not installed, incorrectly installed, or flat	Check battery compartment and reinstall batteries if necessary
	Obstruction between IR lens and remote control	Remove any obstruction
Player does not respond consistently to the remote control	The player is not configured to use the correct remote type	Change the 'Remote Type' item on the 'Operation' page of the Set-up menu to the correct type
Player does not respond to a learning remote control	The remote control has not been programmed correctly	Reprogram the remote control. If programming from the supplied (ARCAM) remote control, ensure that the ARCAM remote control is configured to DVD and not to CD (see above)

Problems with video output

Problem	Possible cause	Solution
No picture!	Incorrect input selected on the TV	Select the appropriate video input on the TV (consult your TV handbook)
	Bad video connection from DV78 to TV	Check connections at both ends and, if necessary, try an alternative cable
	The player has been put into standby (the power LED is red)	Press the green button on the remote control to bring the player out of standby
	Progressive scan output from the DVD player is being used, but the television (or another device in the signal path) cannot handle progressive scan input	Press and hold the **STOP** button on the front panel (**not** the remote control) for at least five seconds. The video will change from progressive scan to interlaced output.
'Black bars' are shown at the top and bottom of the screen	This can occur when a 'Wide screen' film is viewed on a 4:3 format television. Even with a 16:9 format television, 'black bars' may still be visible. This is because the DVD being viewed, although 'Wide screen', is not in 16:9 format. Many films are in 1:2.35 format, which will not completely fill a 16:9 screen.	
Picture is coloured strangely	'HQ video' is set incorrectly in 'Setup' menu	Enter the 'Setup' menu and check the 'HQ video' setting (see page 9)
	Component or RGB video leads are crossed	Check wiring between the DV78 and the TV monitor
	'TV system' is set incorrectly in 'Setup' menu	Enter the 'Setup' menu and check the 'TV system' setting (see page 9)
Picture is 'jerky' or shimmers	This occurs when NTSC discs (such as those from the USA) are played in a machine where the output is set to PAL (such as those sold in Europe), or vice-versa	If your television can handle both NTSC- and PAL-format video, then enter the 'Setup' menu and change the 'TV system' setting (on the 'Video' page) to 'Auto'.
The picture freezes for a moment approximately half way through a film	This is caused by the player changing layers on a two-layer disc	There is no fault. Further information about disc layer changes can often be found on the rear cover of the disc packaging.
The picture freezes for a moment at random points in a film	The disc is dirty or damaged	A damaged or dirty disc may cause audio and/or video drop-outs to occur (and may be accompanied by increased drive noise). Clean or replace the disc.

Problems with audio output

Problem	Possible cause	Solution
No sound!	Incorrect input selected on audio device (decoder, receiver, amplifier, etc.)	Select the appropriate input on the audio device (consult that product's handbook)
	Bad audio connection (analogue or digital) from DV78 to audio device	Check connections at both ends and, if necessary, try an alternative cable
No sound from the centre/rear speakers	A two-channel source, such as a CD, is being played	There is no fault
	The 'Audio' is set incorrectly in the 'Setup' menu	Enter the 'Setup' menu and change the 'Audio' setting to 'Bitstream/2ch.' (see page 9)
	Bad connection between the DV78 and the amplifier/receiver or the amplifier/receiver and the speakers	Check connections at both end and, if necessary, try alternative cables

Problems with disc playability

Problem	Possible cause	Solution
Player loads disc but does not play, or play-back halts unexpectedly (perhaps with the message 'Invalid Region' being displayed)	Not all discs play automatically when loaded	Press PLAY
	There is a fault in the manufacturing of the disc	Some discs are manufactured incorrectly, and are known to cause problems on ARCAM (and other) DVD players. Naturally, we aim to support all discs; from time-to-time we issue software upgrades for the player that fixes new problems of which we are aware. Please contact ARCAM customer support for further details.
	The disc is from the wrong region	DVD discs are designed to be played only in the region that they are sold in (for example, discs from the USA are 'Region 1' and discs from Europe are 'Region 2'). Your player is factory-configured to play discs from the region it is to be sold in, and may not play discs from other regions.
Disc does not play and 'Bad Disc' is displayed	The disc is damaged or dirty, or does not contain any files that the DV78 can handle	Remove disc from tray and check surfaces for damage or dirt. In the case of a CD-ROM, check that the disc contains valid MP3/WMA or JPEG files.
Some MP3/WMA files cannot be played	There are some restrictions on the type of MP3/WMA files that the DV78 player can play	See page 18 of this Handbook
The player takes a long time to identify a CD	Since this is a DVD player (primarily), it checks for discs in the following order: DVDs, SVCDs, VCDs, CDs. Therefore it takes longer to identify a CD than any other disc type.	
The front-panel display is not illuminated	The front-panel display has been switched off	The front panel supports three different levels of illumination. Press the 'DISP' button on the remote control to select your preferred level

Before contacting customer services

If any problem persists or cannot be cured using the advice given, either contact your Arcam dealer or Arcam customer support.

Before contacting Arcam customer services with a question however, it is useful to have various version and region numbers available. This information is displayed in the top left corner of the screen when the player is first switched on (or brought out of standby).

This information is shown for approximately two seconds, and has the following format:

software version/ drive version/ Arcam region/ DVD region

Remote-control codes

The following table gives the IR-commands accepted by the DV78. The system code for the DV78 is 25 (in common with other Arcam DVD players).

Power commands

Command	Decimal Code
Power toggle	25–12
Power-on	25–123
Power-off	25–124

Playback control commands

Command	Decimal Code
Track number 'n', (e.g., 1)	25–n (e.g., 25–1)
Track forward	25–32
Track back	25–33
Fast forward	25–52
Fast rewind	25–50
Slow forward	25–30
Slow rewind	25–31
Open	25–45
Pause	25–48
Stop	25–54
Play	25–53

Display control commands

Command	Decimal Code
Display	25–18

Advanced control commands

Command	Decimal Code
Repeat toggle	25–29
Repeat A-B	25–59
Clear	25–58
Programme	25–41
Up	25–86
Down	25–85
Left	25–81
Right	25–80
OK	25–87
PMode	25–64
Subtitle	25–65
Title	25–66
Menu	25–67
Zoom	25–68
Audio	25–69
Mem (Bookmark)	25–70
Return	25–72
Angle	25–73
Setup	25–74
Status	25–75
Search	25–76
PL	25–77
Trim	25–37

Technical specifications

General	
Power Requirements	100/115V or 230V AC, set by voltage selector switch on rear panel
Power consumption	< 35 VA
Dimensions	435mm x 80mm x 350mm
Weight	net: 5.2kg; packed: 8.0kg
Video outputs	
Composite video	1 x gold plated phono. 1V pk-pk in 75Ω
S-Video	1 x 4-pin mini-DIN. Y 1V pk-pk in 75Ω, C 0.3V pk-pk in 75Ω
Component video	Interlaced or Progressive 3 gold plated phono sockets. Y 1V pk-pk in 75Ω, Pb 0.7V pk-pk in 75Ω, Pr 0.7V pk-pk in 75Ω
SCART socket with RGB video	All 0.7V in 75Ω, composite video 1V in 75Ω, and stereo audio Auto switching of TV with aspect ratio control
Audio outputs	
Analogue audio outputs	Stereo outputs on gold plated phono sockets
Output level	2.2V rms at 0dB signal, 4V rms with HDCD discs
Frequency response	20Hz to 20kHz (+0.1db, −0.5dB)
THD+N	<0.005% for 1kHz 0dB signal, measured 22Hz–22kHz, unweighted
Signal-to-noise ratio	105dB, measured 20Hz–20kHz, unweighted
Digital audio output (IEC958)	PCM/Dolby digital/MPEG/DTS on gold plated phono (coax) and TOSLINK (optical)
Accessories supplied	
	Remote control
	2 x AAA batteries
	mains lead
E&EO	

NOTE: All specification values are typical unless otherwise stated.

Continual improvement policy

Arcam has a policy of continual improvement for its products. This means that designs and specifications are subject to change without notice.

Guarantee

Worldwide Guarantee

This entitles you to have the unit repaired free of charge, during the first two years after purchase, at any authorised Arcam distributor provided that it was originally purchased from an authorised Arcam dealer or distributor. The manufacturer can take no responsibility for defects arising from accident, misuse, abuse, wear and tear, neglect or through unauthorised adjustment and/or repair, neither can they accept responsibility for damage or loss occurring during transit to or from the person claiming under the guarantee.

The warranty covers:

Parts and labour costs for two years from the purchase date. After two years you must pay for both parts and labour costs. **The warranty does not cover transportation costs at any time.**

Claims under guarantee

This equipment should be packed in the original packing and returned to the dealer from whom it was purchased, or failing this, directly to the Arcam distributor in the country of residence.

It should be sent carriage prepaid by a reputable carrier — NOT by post. No responsibility can be accepted for the unit whilst in transit to the dealer or distributor and customers are therefore advised to insure the unit against loss or damage whilst in transit.

For further details contact Arcam at:

Arcam Customer Support Department,
Pembroke Avenue, Waterbeach, CAMBRIDGE, CB5 9QR, England.

Problems?

If your Arcam dealer is unable to answer any query regarding this or any other Arcam product please contact Arcam Customer Support at the above address and we will do our best to help you.

On line registration

You can register your Arcam product on line at:

www.arcam.co.uk